## WHAT IS CLAIMED IS:

1. A purified polypeptide selected in the group comprising the following peptides :

MSP3a: 167-YEKAKNAYQKANQAVLKAKEASSYD-191 (SEQ ID No: 11),

MSP3b: 184-AKEASSYDYILGWEFGGGVPEHKKEEN-210 (SEQ ID No: 12),

MSP3c: 203-PEHKKEENMLSHLYVSSKDKENISKEND-230 (SEQ ID No: 13),

MSP3d: 211-MLSHLYVSSKDKENISKENDDVLDEKEEEAEETEEEELEEK-251

(SEQ ID No: 14), and combinations thereof.

- 2. A long synthetic or recombinant polypeptide comprising epitopes contained within a MSP-3a peptide (SEQ ID No: 11), a MSP-3b peptide (SEQ ID No: 12), a MSP-3c peptide (SEQ ID No: 13), or a MSP-3d peptide (SEQ ID No: 14) and combinations of said peptides.
- 3. An immunogenic composition comprising as an immunogen a long synthetic or recombinant peptide comprising epitopes contained within a MSP-3b peptide (SEQ ID No: 12), a MSP-3c peptide (SEQ ID No: 13), or a MSP-3d peptide (SEQ ID No: 14) and combinations of said peptides.
- 4. A vaccine against malaria comprising a long synthetic or recombinant peptide comprising epitopes contained within a MSP-3b peptide (SEQ ID No: 12), a MSP-3c peptide (SEQ ID No: 13), or a MSP-3d peptide (SEQ ID No: 14) or combinations of said peptides, and a pharmaceutically acceptable carrier.
- 5. The immunogenic composition of claim 3 or the vaccine of claim 4, wherein said long synthetic or recombinant peptide further comprises the epitopes contained within a MSP-3a peptide (SEQ ID No: 11).
- 6. The immunogenic composition of claim 3 or the vaccine of claim 4, which is formulated for subcutaneous injection.
- 7. The immunogenic composition or the vaccine of claim 6, comprising between 3 µg and 100 µg of a long synthetic peptide per injection dose.

- 8. The immunogenic composition of claim 3, further comprising Alum and/or Montanide as an adjuvant.
- 9. The vaccine of claim 4, wherein said pharmaceutically acceptable carrier comprises Alum and/or Montanide.
- 10.A monoclonal antibody directed against a polypeptide according to claim 1 or claim 2.
- 11.A composition of purified polyclonal antibodies directed against a polypeptide according to claim 1 or claim 2.
- 12.A pharmaceutical composition comprising antibodies according to claim 10 or claim 11.
- 13.A method for immunizing against malaria an individual or a mammal that can contract malaria, comprising the step of administering to this individual or mammal in need of such immunization the immunogenic composition of claim 3 or the vaccine of claim 4.
- 14. The method of claim 13, wherein said immunogenic composition or vaccine is administered via subcutaneous injection.
- 15. The method of claim 8, wherein said administration comprises two or three injections of said immunogenic composition or vaccine.
- 16.A method for *in vitro* evaluation of a premunition state against malaria in an individual or a mammal that can contract malaria who has been immunized according to the method of claim 7, comprising the step of putting in contact a sample taken from said individual with a native MSP-3 protein from *Plasmodium falciparum*, under conditions suitable for binding between said MSP-3 protein and antibodies present in the sample; and detecting the binding of said native MSP-3 with antibodies present in the sample, which is indicative of a premunition state.

- 17.A method for *in vitro* prognosis of the fate of a cerebral malaria patient, comprising measuring the level of anti-MSP-3 lgG3 and/or lgG1 antibodies and the serum of said patient; and correlating a low level of said lgG3 and/or lgG1 anti-MSP-3 antibodies with the possibility that the patient may not be saved only by quinine treatment.
- 18.A method for treating a cerebral malaria patient in need thereof, comprising administering to said patient anti-MSP-3 lgG3 or lgG1 antibodies.
- 19.A method for treating a cerebral malaria patient in need thereof, comprising administering to said patient a pharmaceutical composition according to claim 12.
- 20.A method for lowering the parasitemia in a malarial patient in need thereof, comprising administering to said patient anti-MSP-3 IgG3 or IgG1 antibodies or both.
- 21.A method for lowering the parasitemia in a malarial patient in need thereof, comprising administering to said patient a pharmaceutical composition according to claim 12.
- 22. The method of claim 18 or claim 20, wherein said antibodies are directed against the MSP-3b peptide (SEQ ID No: 12), the MSP-3c peptide (SEQ ID No: 13), or the MSP-3d peptide (SEQ ID No: 14) or against several of these peptides.
- 23. The method of claim 20, wherein said antibody is an IgG3.
- 24.A kit for the *in vitro* control of a premunition state against malaria in an individual who has been immunized against it, comprising a native MSP-3 protein from *Plasmodium falciparum*, a medium suitable for formation of an antigen-antibody complex, and reagents for detection of the antigen-antibody complex.